

## Amendment to the Claims

1. **(Currently Amended)** A light distribution control type illuminator, comprising:

a light source for radiating light through electric discharge between opposing electrodes;

a reflecting mirror for reflecting a flux of light that is radiated from the light source in order to control the angle of the flux of light; and

a path changing mirror for changing the path of the flux of light whose divergence has been controlled by the reflecting mirror,

the light source being placed in a manner that makes an axis line connecting the electrodes of the light source, or other reference lines used to specify a posture of the light source, substantially coincide with a center line of the flux of light controlled by the reflecting mirror, the path changing mirror redirecting the controlled flux of light to a desired direction around the center line of the controlled flux of light;

a casing for housing the light source and the reflecting mirror which controls the angle of a flux of light emitted from the light source; and

a path changing mirror container set on a controlled light flux path side of the casing to house the path changing mirror, the path changing mirror container being attached to the casing in a manner that allows the path changing mirror container to rotate about a travel direction axis line of the controlled flux of light; and

a holding means for holding the casing in a desired position in relation to a vertical axis line,

wherein the path changing mirror is a light reflector shaped like a flat plate or a curved

plate and having, on at least one side, ridges that are shaped like an arc, an elliptical arc, or a sine curve in section and that are arranged side by side in contact with one another, the light reflector having a reflecting face and a transparent body portion on the reflecting face, the transparent body portion being composed of the ridges, or a flat or curved structure in which surfaces of the ridges have a light reflecting function.

2-3. (Cancelled)

4. (Previously Presented) The light distribution control type illuminator according to claim 1 wherein the light source is a metal halide lamp or a low pressure sodium lamp.

5. (Currently Amended) A light distribution control type illuminator, comprising:  
a light source for radiating light through electric discharge between opposing electrodes;  
a reflecting mirror for reflecting a flux of light that is radiated from the light source in  
order to control the angle of the flux of light; and  
a path changing mirror for changing the path of the flux of light whose divergence has  
been controlled by the reflecting mirror,  
the light source being placed in a manner that makes an axis line connecting the  
electrodes of the light source, or other reference lines used to specify a posture of the light  
source, substantially coincide with a center line of the flux of light controlled by the reflecting  
mirror, the path changing mirror redirecting the controlled flux of light to a desired direction

around the center line of the controlled flux of light;

a casing for housing the light source and the reflecting mirror which controls the angle of  
a flux of light emitted from the light source; and

a path changing mirror container set on a controlled light flux path side of the casing to  
house the path changing mirror, the path changing mirror container being attached to the casing  
in a manner that allows the path changing mirror container to rotate about a travel direction axis  
line of the controlled flux of light; and

~~The light distribution control type illuminator according to claim 1,~~ \_\_\_\_\_ wherein the path  
changing mirror is a light reflector shaped like a flat plate or a curved plate and having, on at  
least one side, ridges that are shaped like an arc, an elliptical arc, or a sine curve in section and  
that are arranged side by side in contact with one another, the light reflector having a reflecting  
face and a transparent body portion on the reflecting face, the transparent body portion being  
composed of the ridges, or a flat or curved structure in which surfaces of the ridges have a light  
reflecting function.

6. (Cancelled)

7. (Currently Amended) The light distribution control type illuminator according to ~~claim~~  
claim 5, wherein the light source is a metal halide lamp or a low pressure sodium lamp.

8-9. (Cancelled)